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SPE RESPONSE FOR CERTIFICATE OF CORRECTION

DATE

: 10/3/07

Paper No.: _____

TO SPE OF

: ART UNIT 2618

SUBJECT

: Request for Certificate of Correction for Appl. No.: 10714023 Patent No.: 7239853
IFW

Please respond to this request for a certificate of correction within 7 days.

Please review the requested changes/corrections as shown in the attached certificate of correction. Please complete this form (see below) and forward it with the file to:

Changes to claims approved?

Certificates of Correction Branch (CofC)

South Tower - 9A22

Palm Location 7580

DAVID IRVINE

Certificates of Correction Branch

703-308-9390 ext. _____

Thank You For Your Assistance

The request for issuing the above-identified correction(s) is hereby:

Note your decision on the appropriate box.

☐ **Approved**

All changes apply.

☐ **Approved in Part**

Specify below which changes **do not** apply.

☐ **Denied**

State the reasons for denial below.

Comments: _____

SPE

Art Unit

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

Page 1 of 2

PATENT NO. : 7,239,853 B2
APPLICATION NO. : 10/714,023
ISSUE DATE : July 3, 2007
INVENTOR : Brian Kearns

Claim 1. A switching circuit for use at the antenna of a multiband mobile cellular handset, the circuit comprising:

- an antenna port,
- a transmit (TX) low band port,
- a TX high band port,
- at least one receiver (RX) port,

the circuit further comprising a single pole, triple throw (SP3T) solid state voltage-controlled switch which includes a plurality of single pole, single throw (SP1T) solid state switching devices to selectively connect any one of the TX low band port, TX high band port and RX port to the antenna port

the antenna port is connected to the TX low band port via a first SP1T device, to the TX high band port via a second SP1T device, and to the RX port via first and second frequency-dependent phase shifting elements connected in series,

the switching circuit further including a first tuned circuit connected to the junction of the first and second frequency-dependent phase shifting elements via a third SP1T device and a second tuned circuit

connected to an end of the second frequency-dependent phase shifting element via a fourth SP1T device, the first tuned circuit being tuned to resonate substantially at a center of a TX high band frequency range, the second tuned circuit being tuned to resonate substantially at a center of a TX low band frequency range, the first frequency-dependent phase shifting element corresponding to a quarter wavelength at frequencies in the TX high band frequency range, and the first and second frequency-dependent phase shifting elements in combination corresponding to a quarter wavelength at frequencies in the TX low band frequency range,

wherein the first SP1T device includes a cathode connected to the antenna port and an anode connected to the TX low band port,

wherein the second SP1T device includes a cathode connected to the antenna port and an anode connected to the TX high band port,

wherein the third SP1T device includes an anode connected to the junction of the first and second frequency-dependent phase shifting elements and a cathode connected to the first tuned circuit, and

wherein the fourth SP1T device includes an anode connected to the end of the second frequency-dependent phase shifting element and a cathode connected to the second tuned circuit,

the tuning circuit further including a first voltage input terminal connected to the anode of the first SP1T device and the cathode of the third SP1T device and a second voltage input terminal connected to the anode of the second SP1T device and the cathode of the fourth SP1T device.

Claim 4. A switching circuit as claimed in claim 1, wherein the first and second frequency-dependent phase shifting elements are first and second LC networks.